

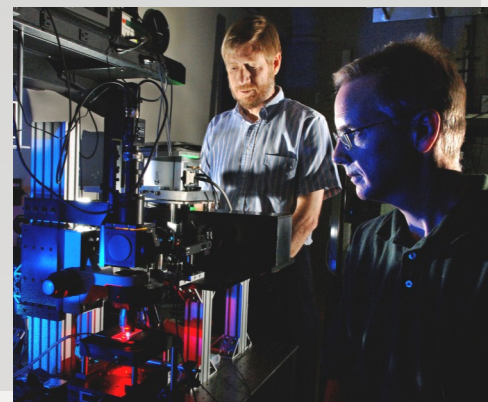
## TECHNOLOGY READINESS LEVEL: 4

KEY ELEMENTS OF THE TECHNOLOGY HAVE BEEN PROVEN TO WORK AS EXPECTED IN THE LABORATORY ENVIRONMENT.

**US PATENT PENDING**

## TECHNOLOGY SUMMARY

Sandia's advanced activated carbon is used for the adsorption of noble gases (argon, krypton, and xenon) for the reprocessing of spent nuclear fuel. This solution is simple, reliable, and affordable. This development is safer due to the fire hazards associated with traditional activated carbon being significantly reduced.



Activated carbon adsorbers have numerous industrial applications including chemical, petrochemical, environmental engineering, nuclear, military, and specialist extraction. In these industries, the activated carbon is used to control emissions of solvents, volatile organic compounds (VOCs) and other chemicals, with the reduced risk of spontaneous ignition and fire hazards.



## POTENTIAL APPLICATIONS

- Mining
- Nuclear Power & Fuel Processing
- Waste Management
- Water Purification
- Environmental Clean-Up
- Medical & Chemical Industries

## TECHNOLOGICAL BENEFITS

- Significant reduction in risk of fire hazards associated with traditional activated carbon
- Adsorption of noble gases
- Reduces risk associated with nuclear fuel reprocessing
- Reduces risk and environmental impact in numerous industries

## TECHNOLOGY INQUIRY?

For more information or licensing opportunities contact us at

**[ip@sandia.gov](mailto:ip@sandia.gov)**

Refer to SD # 11471

or visit

**<https://ip.sandia.gov>**